

## auromobile

The Connoisseur's Magazine of Motoring Today, Yesterday and Tomorrow

Fourth Quarter 1981

Volume XIX, Number 4

#### PUBLISHER AND EDITOR IN CHIEF: L. SCOTT BAILEY

**EUROPEAN EDITOR:** 

**GRIFFITH BORGESON** 

ART DIRECTORS:

THOMAS C. HOUTZ, MICHAEL PARDO

**CONTRIBUTING EDITORS:** 

ANGELO TITO ANSELMI, WILLIAM BODDY, RUSS CATLIN, PAUL FRÈRE, ALLAN GIRDLER, JEFFREY I. GODSHALL, KARL LUDVIGSEN, JOHN B. MONTVILLE, GARY WITZENBURG PHOTOGRAPHERS:

DOUGLASS WHITFIELD BAILEY, GIORGIO BELLIA, GIORGIO BOSCHETTI, RICHARD A. BROWN, NEILL BRUCE, RICK LENZ, CARL MALOTKA, ROY QUERY, STANLEY ROSENTHAL

ASSOCIATE EDITORS: JOHN J. KEEBLER III, MARGUERITE KELLY

EDITORIAL ASSISTANT:

ALAN COON

WALTER GOTSCHKE, PETER HELCK, YOSHIHIRO INOMOTO, JOHN PECKHAM,

KEN RUSH

ARTISTS:

RESEARCH:

HENRY AUSTIN CLARK, JR.

PRODUCTION EDITOR: MARY B. WILLIAMS

RESEARCH ASSOCIATES: CHARLES L. BETTS, JR., U.S.A., NICHOLAS FRANCO, JR., SPAIN, GIANNI ROGLIATTI, ITALY,

MICHAEL SEDGWICK, GREAT BRITAIN

STAFF ASSISTANT: MARGARET BUCHANAN BAILEY

BUSINESS MANAGER: KEVIN G. BITZ

### VICE-PRESIDENT: MARGARET T. BAILEY

Automobile Quarterly is published quarterly by Automobile Quarterly, Inc., in association with the Princeton Institute for Historic Research. Editorial Offices: 221 Nassau Street, Princeton, New Jersey 08540. Office of Publication: 245 West Main Street, Kutztown, Pennsylvania 19530. Telephone: 215-683-8352. Automobile Quarterly is printed in the United States by the Kutztown Publishing Company on Mead Offset Enamel paper; color separations by Lincoln Graphics Incorporated, Cherry Hill, New Jersey; binding by National Publishing Company, Philadelphia, Pennsylvania.

Single copies: \$12.95. Annual subscriptions: \$43.80, U.S.A.; \$46.80, overseas. Four-Year Indexes (Volume I-IV, Volume VVIII, Volume IX-XII and Volume XIII-XVI) are available at \$12.95 each. All subscriptions, orders, changes of address and correspondence concerning subscriptions should be sent to 245 West Main Street, Kutztown, Pennsylvania 19530. Second class postage paid at Kutztown, Pennsylvania and at additional mailing offices.

> © Automobile Quarterly, Inc., 1981. All rights reserved under Pan American and Universal Copyright Conventions by Automobile Quarterly, Inc. Reproduction without permission is prohibited. Library of Congress Catalog Card Number 62-4005. ISSN 0005-1438.

THE GO

MAR

MOTOL

# Militaire

### Motorcycle that Pretended to be a Car

In the early days of automobiles and motor-cycles, no one really knew what these new machines should look like. Understandably, the road to today's vehicles spanned a wide variety of far-ranging experiments, not all of them successful. Intriguing examples are the Militaire motorcycle and its successor, the Militor. Looking at the original Militaire's specifications, it's evident that here was a unique attempt to marry car and cycle elements into a design well ahead of its contemporaries—perhaps too far ahead.

The Cleveland-based Militaire firm originally planned to develop vehicles for the U.S. Army. On paper its first attempt, the "Patent Underslung Militaire," certainly resembled conventional motorcycles. Not so the actual vehicle. The prototype featured several unusual variations on the conventional motorcycle theme: a steering wheel in lieu of handlebars, a sprung-pillar bucket seat replacing the customary bicycle saddle and wooden, artillery wheels with hub-center steering instead of the usual spoked rims. And, reminiscent

## BY KEN GROSS Photography by Roy Query

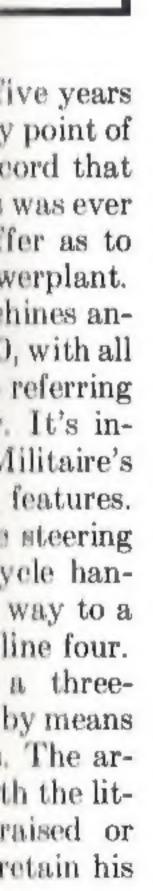
of the Scripps-Booth Bi-Autogo, there were diminutive "training wheels" at the rear. An ideal way to train new cyclists? Hardly. The little outriggers were to support upright passage of the Militaire when reverse gear was engaged in the cycle's friction transmission.

The Militaire's fuel tank was located behind the seat, and the 30 cid engine, positioned far forward, sat amidst a pressed steel, automotive-type chassis that featured floorboards for rider comfort. Although the entire effort was certainly unconventional and might have been most expensive to produce, nothing daunted the intrepid manufacturer who was quoted by *Motor Cycle* in February 1912 as saying that the Militaire "... is the outcome of two years of experimental work."

The company was "... convinced it is five years ahead of the motorcycle world from every point of view." Futuristic or not, there is no record that more than one of the original prototypes was ever built, though contemporary sources differ as to engine size and use of a second 80 cid powerplant.

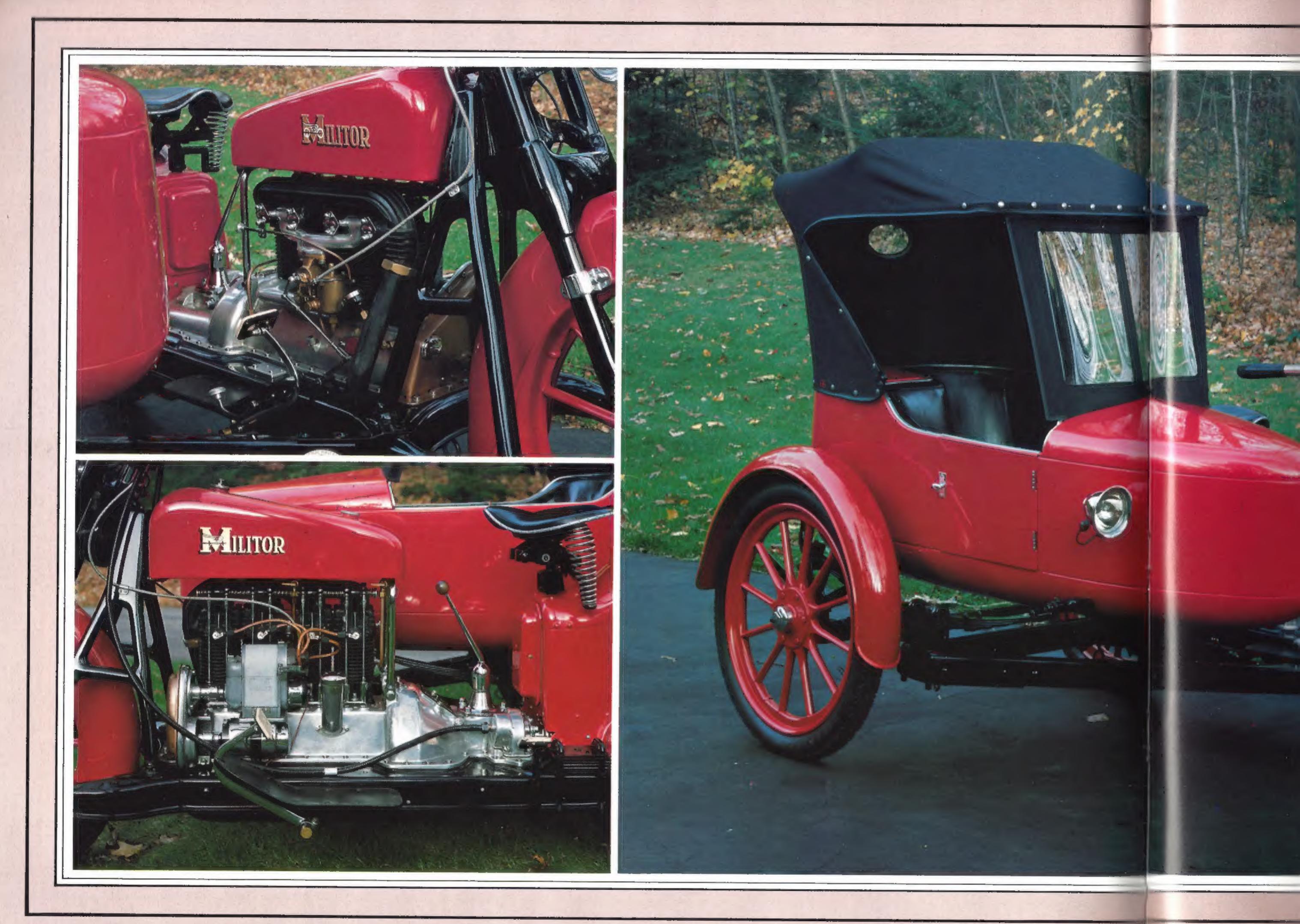
A modest target of a thousand machines annually was announced by the firm in 1910, with all the advertising and salesroom literature referring to the Militaire as a two-wheeled car. It's interesting to see just how far the Militaire's creators went in replicating automotive features. Although the 1913 version dropped the steering wheel in favor of conventional motorcycle handlebars, the single cylinder engine gave way to a 68 cid, unit construction, air-cooled, in-line four.

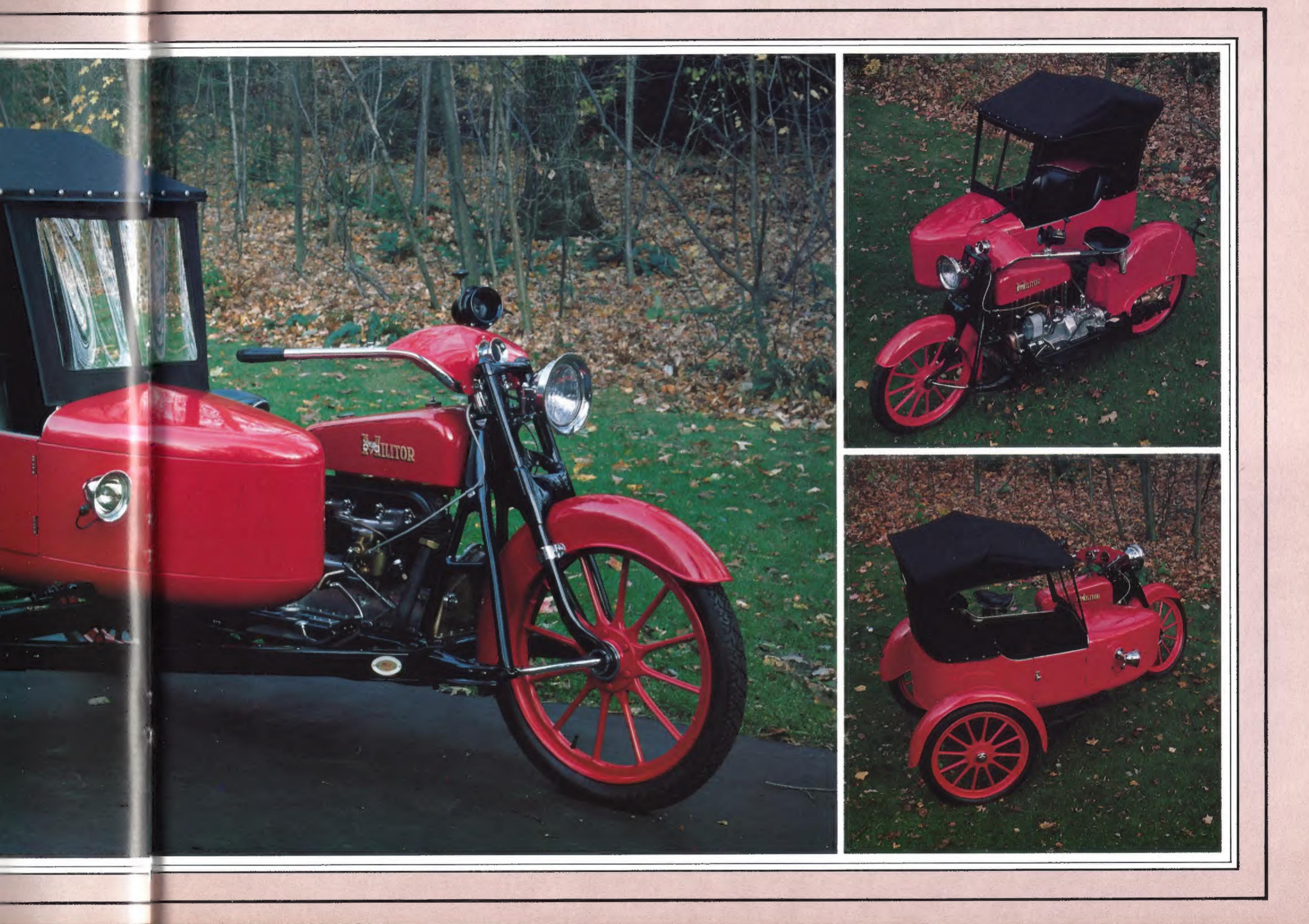
The two-speed gearbox became a three-speeder which shifted, automobile-style, by means of a gear lever between the rider's legs. The artillery wheels were still around, along with the little outriggers, "... which may be raised or lowered at the will of the operator to retain his

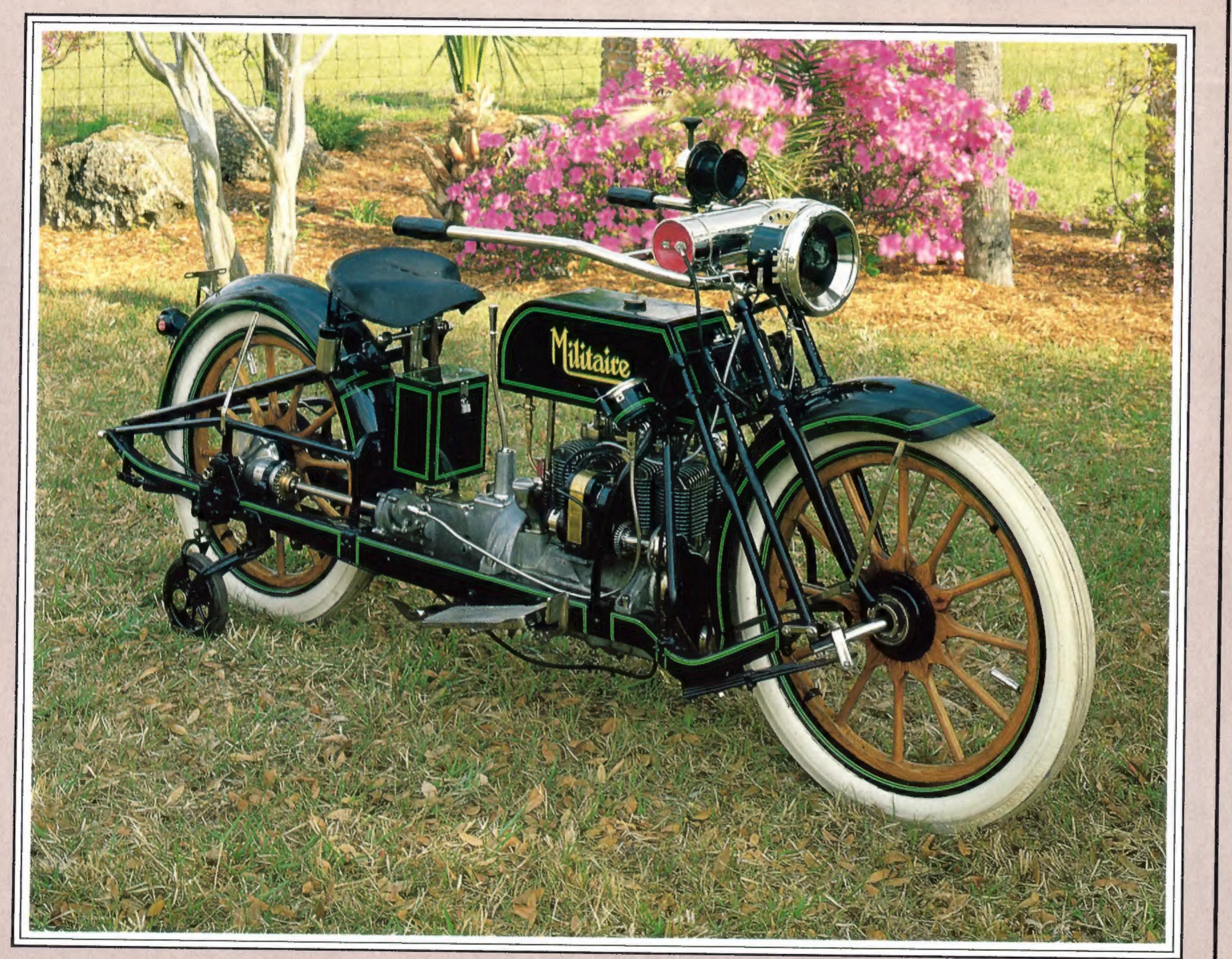




1919 Militor • Owner: Ray Pieczarka







1915 Militaire • Owner: Bob Clifton

equilibrium when stati power tran driveshaft,

N.R. must have man. Ever fledgling finew fundinaround qualifie, the National least eight to Buffalo, Jersey, late old Knox Bridgeport

Before four-cylind license in a Company Although "Safety first the training pions are reasons are reasons are reasons."

Company of der N.R. 8 people that wheeled can tract many failing to a relative infany vehicle definitely nearly Milit developme maladies wheels we swamped wheels we say the swamped wheels where swamped wheels we say the swamped wheels

N.R. S considerable headed east At first the again the e attract man bankrupt.

But the Phoenix-like plucky come City, and go to the U.S. France a ce arose. Two

equilibrium when going slowly or to act as a stand when stationary." In keeping with the car theme, power transfer took place through an abbreviated driveshaft, and bevel gears spun the rear wheel.

N.R. Sinclair, the power behind Militaire, must have been a most persuasive and persistent man. Every time things looked bleak for the fledgling firm, Sinclair miraculously came up with new funding. Needless to say, he had to move around quite a bit. During the course of its brief life, the Militaire company was reorganized at least eight times and would move from Cleveland to Buffalo, New York—then to Jersey City, New Jersey, later to Springfield, Massachusetts at the old Knox Motor Car factory and finally to Bridgeport, Connecticut.

Before the moves began, however, the new four-cylinder Militaire was to be produced under license in St. Louis by the Champion Motor Car Company under the name "The Champion." Although the company's advertising slogan, "Safety first, it stands alone," with its reference to the training wheels, survives in print, no Champions are now extant.

By mid-1913 the original Militaire Auto Company of Cleveland was still hard at work under N.R. Sinclair's tutelage, working to convince people that their product was really a twowheeled car. This peculiar sales strategy didn't attract many buyers, alienating motorcyclists and failing to entice car prospects who, despite the relative infancy of the auto industry, clearly felt any vehicle with less than four wheels was definitely not a car. Besides confused positioning, early Militaires suffered from an acute lack of development work. Lubrication and cooling maladies were commonplace, the heavy wooden wheels were a problem and the factory was swamped with returns and warranty work on the few vehicles sold.

N.R. Sinclair's capacity for regeneration was considerable. As events heated up in Cleveland, he headed east to a new group of backers in Buffalo. At first the machines seemed more reliable, but again the confusing marketing strategy failed to attract many buyers. Early in 1917 Militaire went bankrupt.

But the irrepressible Sinclair wasn't through. Phoenix-like, with the new name "Militor," the plucky company rose again, this time in Jersey City, and got back to its original mission of sales to the U.S. Army. With America's intervention in France a certainty, a true marketing opportunity arose. Two Militor sidecar outfits were supplied to

the Ordnance Corps for evaluation. The Army's proving ground in Virginia was the scene of the competition—on the worst roads available. Still, the Militor factory riders were confident their 800 pound trikes could meet the test. The company had installed steel disc wheels and 3.5 inch tires to ensure their steed could mow down anything in its path.

A brutal demonstration ensued in which the two Militors were driven up to a three-foot-long stone slab, eight inches thick and eighteen inches wide. After pushing the obstacle over, the ponderous Militors climbed the slab and tottered on. Sadly, both vehicles failed during the "destruction test run" due to overheating and front fork fractures. Nor did any of the competitors finish; all were trundling a 500 pound test load on deplorable roads.

Overall, the lighter, production-proven Harleys and Indians had outperformed the heavy Militors, but even they were deemed worthy to be awarded a small contract. With its test field littered with broken motorcycles, the Army may have concluded that the trial was worse than combat conditions. In any case, they ordered some of each and it was on to France! Overseas, engine reliability would prove to be an important factor. Predictably, the heavy Militors sank into the muddy fields of Flanders and became a distant choice behind the Springfield and Milwaukee products.

After the war ended, in 1919, the redoubtable Sinclair had arranged yet another merger, this time with Knox Motors. Production resumed in Springfield, right across the street from Indian. Records indicate that total production in a year and a half was just twenty vehicles; Indian needn't have worried.

Just a year later Sinclair announced an optimistic production target of five thousand Militors from yet another new company, this time bearing his name. The revised "Auto-cycle" now featured an ohv, 68 cid 4-cylinder engine. There was a redesigned front fork with a unique circular support rod running right through the front hub, quarter-elliptic rear springs and the automobiletype frame. The big, two-seater, permanently attached sidecar was mounted on semi-elliptic springs and had its own sidelight, as well as a top and windshield. Other noteworthy features included a unit construction driver's seat and rear wheel enclosure which could be quickly detached for access to the double universal joint shaft drive and the wheel itself.

Up front, a three-speed gearbox was driven through an eight-inch plate clutch. Brake and clutch pedals followed automobile practice. There was also a reverse gear which, with the stable sidecar platform, provided a most handy parking advantage. The training wheels were finally gone. The crankcase and lower halves of the clutch housing and transmission were an integral part of the Militor's frame. Many components were from proprietary suppliers, as were the Splitdorf generator, Kingston carburetor and Berling magneto.

Finally, Militor advertising admitted that its product was indeed a motorcycle but stressed its many automobile-like features as distinct advantages. In the excitement of clear positioning the company moved once again, this time under the auspices of a reputable engineering firm, the Bullard Machine Tool Company of Bridgeport. Unfortunately, no amount of quality assembly could disguise an inherently poor design. The engine oil pumps weren't up to their task, gearbox lubrication was inadequate due to faulty seals and a few poorly designed alloy castings fractured from stress.

The Bullard engineers eventually solved the Militor's problems by redesigning castings, beefing up oil pump gears and developing more efficient seals and oil control piston rings, but it was much too late. Despite hopping from city to city, the Militor's reputation for unreliability preceded its sales announcement. Of the 460 original Bridgeport orders, only 20 vehicles were shipped. Once again a parade of rejects returned to the factory while money and enthusiasm quickly ran out. As 1922 ended, so, at last, did the Militor.

Did the Militor deserve a better fate? It's hard to say. Certainly Sinclair's early reluctance to call the vehicle a motorcycle, albeit with some unique features, served more to confuse prospects than to attract them. This, coupled with a long series of mechanical problems uncorrected until the very end, proved the Militor's ruin.

By 1922 light and substantially reliable automobiles were available, and motorcycles, too, had reached a high level of development. Four-cylinder engines in motorcycles had been proven earlier by Pierce and Henderson so multi-cylinders weren't the culprit. The Militor's complexity could hardly have made it a profitable venture, yet Sinclair, time after time, was somehow able to attract backers. Despite his efforts it's unlikely that, after twelve years of trying, more than a hundred vehicles were ever completed. \$\Delta\$